SUMMIT

ENVIRONMENTAL CONSULTING • GEOTECHNICAL ENGINEERING • CONSTRUCTION MATERIALS TESTING

December 11, 2009

PN: 16861

Ms. Jean Firth
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04333

RE: Underground Storage Tank Removal Site Assessment Report
Former American Tissue Stack Site
1 Park Street
Augusta, Maine 04330

Dear Ms. Firth:

On your behalf, Summit Environmental Consultants, Inc., (Summit) completed an Underground Storage Tank (UST) Removal Site Assessment for the above referenced property (the Site) on August 10 through August 19, 2009. This report is an after-the-fact UST assessment, as the contractor performing the investigation for the USEPA did not submit a report to the MEDEP. Refer to Figure 1 for a Site Location Map. Refer to Figure 2 for a Site Plan. Summit has submitted a copy of this report to the Maine Department of Environmental Protection (MEDEP) UST Program Administrator and the Augusta City Manager as required by state regulations.

The location of the Site and applicable tank information are presented below in summary form:

Owner and Operator: City of Augusta

(Mailing Address) 16 Cony Street
Augusta, Maine 04330

Site Location: Tax Map 39, Lot 32
Former American Tissue Mill
1 Park Street
Augusta, Maine 04330

Maine Registration# 744

50,000-gallon, dual-walled steel UST containing number six oil

Date of Site Assessment: August 10 through August 19, 2009

Evidence of Discharge: One 50,000-gallon number six oil UST and approximately 180 linear feet of underground transfer piping was removed from the Site between August 10 and 19, 2009. Summit observed the UST to be in good condition upon removal with no visible cracks or holes. Neither staining nor odors were noted in soils surrounding the UST. Photoionization detector (PID) readings were not collected due to the nature of the material

(number six oil) which had been stored within the UST. As no staining or odors were noted, the MEDEP did not require soil samples to be collected for laboratory analysis.

No staining was observed in soil adjacent to the walls of the USTs or piping upon removal. Two two-inch pipes (one feed and one return associated with the UST was observed to be in good condition. No product was observed in the piping. Piping was cut and removed by Cyn Environmental (Cyn).

Prior to the removal of the UST and the piping, approximately 6,000-gallons of number six oil was removed from the tank by Clean Harbors Environmental Services, Inc. (Clean Harbors) and shipped off-site for proper disposal.

The USTs were removed under the direction of Ms. Jean Firth of the MEDEP. Given that no soil staining was observed surrounding the former UST and associated piping, soil was left in place at the request of Ms. Firth.

INTRODUCTION

Summit completed this UST Removal Assessment in accordance with the MEDEP Chapter 691: Rules for Underground Oil Storage Facilities, Appendix P Regulations for a UST Removal Site Assessment. The purpose of the assessment was to determine whether a discharge of a petroleum product from the former UST or associated piping has occurred that requires notification of the MEDEP and corrective action by the Owner.

SITE DESCRIPTION AND HISTORY

The Former American Tissue Mill Stack (the Site) is located in Kennebec County at 1 Park Street in Augusta, Maine. Figure 1 depicts the location of the Site on the Augusta, Maine U.S. Geological Survey 7.5-minute topographic map. The Site is approximately 1.85 acres in size and is situated at the western end of Park Street.

Figure 2 illustrates the location of nearby buildings, roads, and location of the UST and associated piping at the time of this assessment. Municipal water and sewer serve the Site and properties in the immediate vicinity. Land use in the area is commercial and residential. The Significant Sand and Gravel Aquifer Map of the Augusta, Maine Quadrangle (Craig Neil, 1999) indicates that the Site is not located within a mapped significant sand or gravel aquifer and no public or private water supply wells are known to exist in the vicinity of the Site. As a result, the Site is not considered to be in a "Sensitive Geologic Area".

METHODS

Site assessment methods for the number six oil UST removal included visual observations of soils in the excavations for staining, discoloration and/or sheens indicative of a petroleum release.

RESULTS

Cyn performed the UST and piping excavation and removal as directed by Ms. Jean Firth of the MEDEP under oversight provided by Mr. Peter Graziani of Environment International Government Ltd. (EIGOV), the USEPA's Targeted Brownfield Assessment (TBA) contractor and Mr. John Cressey of Summit. Notes from EIGOV staff are included in Attachment A.

Summit observed soils in the UST excavation to consist of brown sand and gravel fill from zero to sixteen feet below ground surface (BGS). Photographs of the excavation activities and former UST are presented in Attachment B. Neither bedrock nor groundwater was encountered

during excavation. Summit observed the UST to be in good condition upon removal with no visible cracks or holes.

Evidence of soil contamination was not encountered within either the UST or the piping excavation.

CONCLUSION

One 50,000-gallon number six oil UST and approximately 180 linear feet of transfer piping were removed from the Site between August 10 and August 19, 2009. Prior to the removal of the UST and piping, approximately 6,000-gallons of number six oil was pumped from the UST by Clean Harbors and shipped off-site for disposal.

Summit observed the UST to be in good condition upon removal with no visible cracks or holes. Staining was not observed in soils surrounding the UST or the piping. Photoionization detector (PID) readings were not collected due to the nature of the product contained within the UST (number six oil). Representatives of EIGOV, Summit, and MEDEP were present on-site for the entirety of the removal.

Product piping associated with the UST was observed to be in good condition. No product was observed in the piping. Piping was cut and removed by Cyn Environmental.

Given that evidence of contamination was not observed at the Site and the fact that the removal of the UST and product piping was completed under the direction of the MEDEP, Summit does not recommend any additional investigation of the UST site at this time.

Please contact us if you have any questions related to this report.

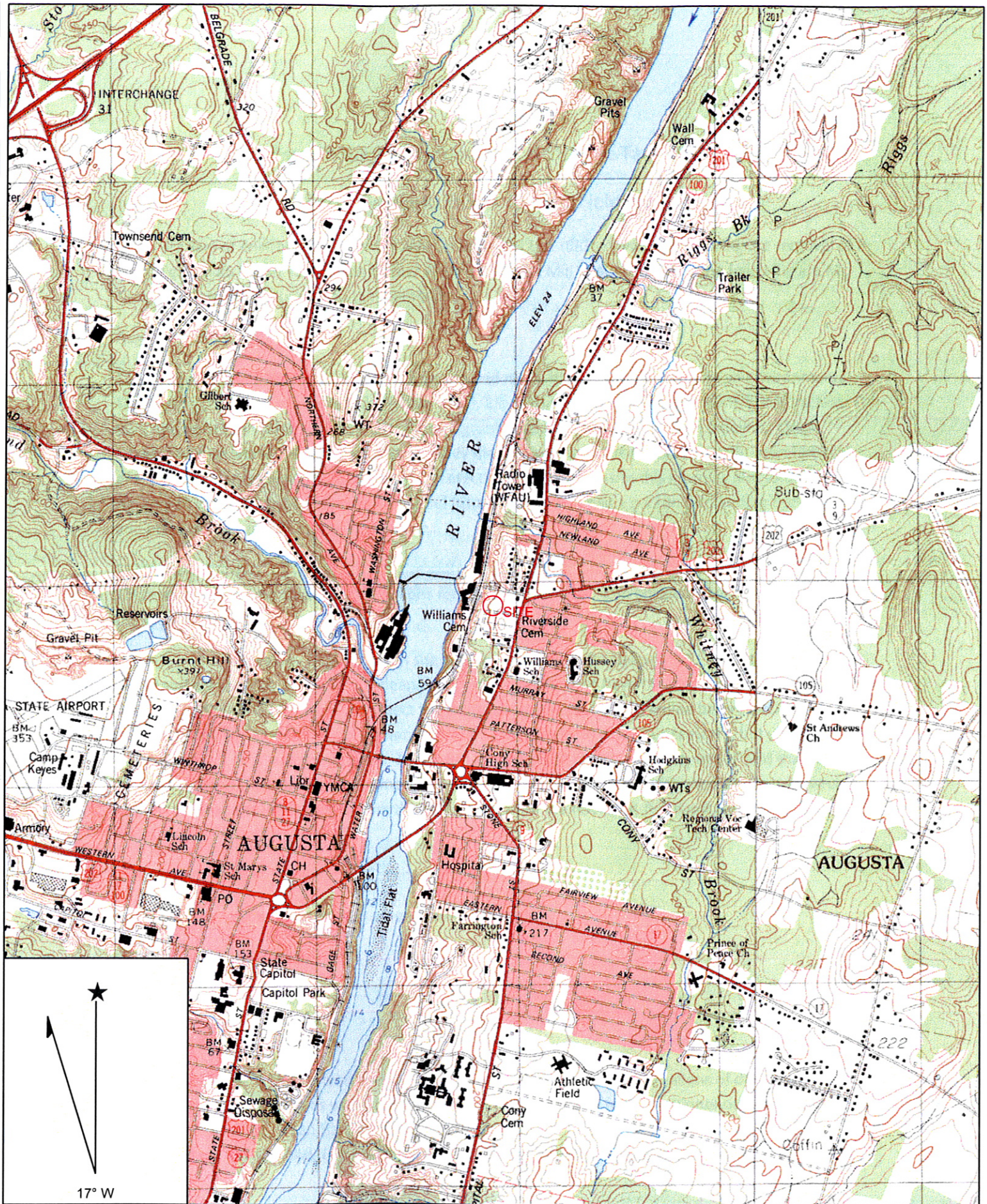
Sincerely;
SUMMIT ENVIRONMENTAL CONSULTANTS, INC.

John K. Cressey
Project Manager

Michael A. Deyling, C.G.
Principal Hydrogeologist

Attachments

cc: UST Administrator, MEDEP
James Byrne, USEPA
Michael Duguay, City of Augusta



Name: AUGUSTA
Date: 12/4/2009
Scale: 1 inch equals 2000 feet

Location: 044° 19' 25.0" N 069° 45' 59.1" W
Caption: Figure 1: Site Location
Former American Tissue Stack
1 Park Street
Augusta, Maine

Augusta Tissue Mill Underground Storage Tank Removal

Peter Graziani, EIGov, Project Field Notes

Peter Graziani of Environment International Government Ltd. (EIGov) was onsite during the removal of a 50,000 gallon #6 Diesel Tank at the former American Tissue Mill in Augusta, ME. The following are Mr. Graziani's field notes during the tank removal.

August 10, 2009-

1033- Peter Graziani (PG) of EIGov arrived on site and met with Bob Moore (BM) of Cyn Environmental. The Cyn personnel on site were Mike Arbour (MA), Bill Gardiner (BG), Bob Moore (BM), Steve Vachon (SV), and Eric Mann (EM). Cyn was clearing and grubbing the area of the tank and pipeline. Clean Harbors was on site still emptying the tank. They may be here until Wed. Aug. 12, 2009. Jean Firth (JF) of the Maine Department of Environmental Protection (DEP) was on site this morning and told Clean Harbors to drain the tank and remove the fuel from the site. Cyn had a person dismantling the electrical and other non-essentials in the pumphouse.

1130- Clean Harbors' oil tanker left the site with approximately 3500 gallons of #6 oil from the tank. There should be approximately 2500 gallons remaining in the tank. Cyn finished clearing the brush in the work area.

1430- JF and John Cressey (JC) arrived on site to discuss the plans for the project. The plan is to have diesel and a vacuum truck on site to clean and pig the pipeline, and have the pipeline removed on Tues. August 11, 2009. PG will call JC to inspect the soil beneath the removed pipeline before backfilling begins. JF decided that the use of a Photoionization Detector (PID) was not necessary, but visual inspection by JC or JF will be required. JF and BM looked inside the pumphouse, and JF said that there is no need to clean the inside of the pumphouse before it is removed. BM questioned whether JF would like BM to clean the walls and vacuum the paint chips from the floor, but JF did not feel that was necessary.

1545- Cyn decided to uncover the pipeline starting at the manhole.

1615- Cyn Env. placed caution tape around the excavation.

1630- All personnel left the site.

August 11, 2009

0800- Peter Graziani (PG) arrived on site. Cyn Env. was on site, and the 400 gallons of diesel and the vacuum truck were on site as well. Cyn Env. was removing material from the pumphouse and preparing to clean the pipeline. Clean Harbors was not on site, and their heater was not operating. On site for Cyn Env. was Steve Vachon (SV), Eric Mann (EM), Bill Gardiner (BG), Steve House (SH), and Brian Hines (BH).

Peter Graziani, ElGov, Field Notes
Augusta Tissue Tank Removal, Aug. 10-18, 2009

0845- Clean Harbors arrived on site, and restarted the heater. The excavation for the pipeline exposed a large, insulated conduit, which contained the fuel pipelines.

0900- John Cressey (JC) arrived on site to oversee Clean Harbors. Cyn Env. began to clean the pipeline. Clean Harbors began to remove the remaining #6 oil from the tank.

1030- Mike Arbour (MA) arrived on site. Cyn Env. finished flushing the pipeline with #2 diesel, but continued to vacuum the residual fuel from the pipeline system. Clean Harbors was still pumping oil from the tank.

1115- Clean Harbors completed the draining of the tank, but has not left the site as they still have heating equipment operating. Cyn Env. is preparing to enter the tank to clean it. Cyn Env. has installed a ventilator that blows air into the tank and vacuums it out at a different location. This is to flush the air in the tank so that it is safe for human entry. The air was monitored by BG prior to the ventilation system installment, and the air was found to be at safe levels of oxygen and LEL, but had a slightly high carbon dioxide reading. Monitoring logs prepared by Cyn Env. will show detail of the air monitoring.

1125- EM of Cyn entered the tank to clean it. EM was tethered to a tripod and the surface was monitored by three Cyn employees (BG, SV, SH). The ventilation was operating while EM was in the tank. MA also monitored the tank cleaning.

1200- EM exited the tank. Clean Harbors left the site temporarily.

1315- Cyn cut the top of the pipe to see if there was any residual fuel in the line. Clean Harbors returned to the site to remove their equipment from the site. Cyn inspected the pipeline at the manhole to determine if the pipe was dry.

1420- The cut at the pipeline determined that the line is dry and can be removed without cutting it into 20 foot pieces. BG began to dig out the western edge of the tank.

1435- Clean Harbors finished removing their equipment, and left the site.

1500- Cyn Env. and PG left the site.

August 12, 2009-

0730- Peter Graziani (PG) arrived on site. Cyn Environmental arrived on site with Bill Gardner (BG who will supervise the daily operations, Brian Hines (BH), Eric Mann (EM), laborer, Steve House (SH) and Steve Vachon (SV), laborer.

0745- Cyn began preparing for tank entry. SV and EM put on Tyvex suits and rubber boots and gloves. Cyn had diesel fuel brought to the site to loosen the #6 oil so that the tank can be properly cleaned. A vacuum/ fan ventilation system was installed for the tank, and a hole was cut into the northern end of the tank for additional ventilation. Cyn plans to spend the entire day inside the tank.

Peter Graziani, ElGov, Field Notes
Augusta Tissue Tank Removal, Aug. 10-18, 2009

0815- Jean Firth (JF) from the Maine Department of Environmental Protection (DEP) visited the site. Mike Arbour (MA) arrived on site.

0845- SV and EM entered the tank to clean it. BG, BH, and SH monitored the surface and kept in contact with EM and SV.

1040- Bob Moore (BM) of Cyn Env. arrived on site with Rich Bell (RB), Cyn Env.'s company manager, to check operations. BG began to pull the pipeline from the ground. There was no visible oil in the soil beneath the line. EM and SV continued to clean the tank by adding diesel fuel to the #6 oil to thin it, and then vacuuming the product from the tank.

1135- RB left the site. Cyn Env. was having problems with the vacuum as there was difficulty vacuuming the oil from the tank. The problem was that there was too large an elevation difference between the bottom of the tank, and the vacuum truck, and the vacuum was not strong enough to properly overcome that elevation difference. Cyn Env. shortened the hose to decrease the linear distance that the product needs to travel.

1210- EM & SV exited the tank, and deconned. The pump was not strong enough to vacuum the oil from the tank so Cyn Env. will bring a stronger vacuum to the site on the morning of Aug. 13, 2009.

1325- Cyn Env. began to remove the pipeline. It was not cut into smaller segments because an inspection of the line indicated that the line was dry, and the chance of an oil spill was extremely low. The pipeline was stored in the eastern end of the site.

1450- Cyn began to clean the site of insulation debris, and secure the site for the day.

1520- JF met John Cressey (JC) & PG at the site to look at the site. JF inspected the soil beneath the former pipeline, and authorized backfilling the trench without additional investigation. JF instructed PG that a Photoionization Detector (PID) was not necessary for soil contamination investigation since the tank was used for #6 oil. JC & PG informed JF about a drain pipe that leads from a spill containment area at the tank fill, and transports material to a wooded area approximately 30 feet to the west. The drain pipe empties into a very small plastic bucket and contains a small amount of #6 oil. JF authorized removing it, and JC will bring a Ground Positioning System (GPS)to the site on Aug. 13, 2009 to survey the location of the drain pipe and the pipeline.

1600- PG, JF, and JC left the site. Cyn Env. left the site 15 minutes prior to PG, JF, and JC.

August 13, 2009

0700- Peter Graziani (PG) arrives on site. Cyn Env. Was on site with Bill Gardiner (BG), Eric Mann (EM), Brian Himes (BH), Carlos Marcel (CM), and & Shawn Cornwall (SC).

0720- Cyn Env. removed the remaining segment of the pipeline, and the drainage line.

0820- Cyn Env. entered the tank to complete the cleaning of the inside. EM & SC were the entrants, and CM & BG monitored from the top of the tank.

1020- EM & SC finished removed oil from the tank and began rinsing it with hot water.

1100- John Cressey (JC) arrived on site to record the location of the pipeline trench and drainage pipe with a GPS. JC said that Cyn can now backfill the entire trench and that the 5 feet of pipe to the north of the manhole can remain.

1150- EM & SC exited the tank. The tank is completely clean.

1320- Cyn Env. completed the backfilling of the pipeline trench, and began to prepare the pumphouse for demolition.

1405- Cyn Env. began to demolish the pumphouse.

1500- The pumphouse was demolished and stockpiled with the exception of the floor slab. The larger excavator is required to move the slab.

1515- Cyn Env. began to clean the site for the day.

1600- Cyn Env., and PG left the site.

August 14, 2009

0715- Cyn Env. and Peter Graziani (PG) arrived on site. The Cyn Env. personnel included Eric Mann (EM) and Bill Gardiner (BG).

0730- BG began to excavate around the tank the best that he could with the smaller excavator.

0945- BG received notice that the delivery of the larger excavator would be delayed until 1500 today.

1045- BG & EM began to place orange fence and caution tape around the perimeter of the excavation to prevent the public from entering the site.

1200- BG, EM, and PG left the site.

Aug. 17, 2009

0715- Peter Graziani (PG) and Cyn Env. arrived on site. Cyn is represented only by Bill Gardiner (BG) at this time; Eric Mann (EM) is due to arrive later today.

0800- BG begins to remove the concrete slabs above the tank with the 330 excavator.

0830- EM arrived on site. BG continued to excavate around the tank.

0915- EM began to operate the smaller (150) excavator. EM began digging around the tank as well.

1030- EM & Mike Arbour (MA) fastened a piece of wood to the opening of the tank to prevent soil from entering the tank. BG removed trees from the north side of the site to allow for more room for the excavator and soil debris.

1345- Jean Firth (JF) and John Cressey (JC) arrived on site with the Maine Department of Environmental Protection's project geologist to inspect the site. They were pleased with the progress.

1440- BG began to build a ramp with which to drag the tank onto. The ramp is on the east side of the tank.

1515- Lionel Cayer, City of Augusta Engineer, and Jerry Dostie, City of Augusta Engineering Technician was on site.

1600-Cyn Env. began to install safety fencing around the excavation for safety purposes. The City of Augusta employees leave the site.

1630- Cyn Env. and PG departed the site.

August 18, 2009

0730- Peter Graziani (PG), Eric Mann (EM) & Bill Gardiner (BG) arrive on site. Jamie Collette (IJC2) and Ray St. Laurant (RS) from R & S Excavation were on site with an additional excavator (size 320). JC2 will operate the 320 excavator, and will be on site all day.

0815- BG & JC2 began to attempt to pull the tank, and make a plan to fully remove the tank.

0910- Jean Firth (JF) arrived on site. Cyn Env. was instructed to stand down until Gary Bucklin (GB) from SW Cole arrives on site. GB is the Maine certified Project Geologist.

0930- GB arrives on site with a Photoionization Detector (PID) to monitor the soil for oil contamination if deemed necessary by GB, PG, or JF.

0935- Cyn Env. began to remove the tank using two excavators, the 320 and 330.

0950- Cyn Env. connected a third excavator (150) to the tank with a chain to assist pulling the tank from the ground. The tank is approximately half of the way out of the excavation.

1015- The tank was completely removed from the excavation, and stored on the northeast corner of the site.

1025- Bob Moore (BM) of Cyn Env. arrived on site. Cyn Env. placed a pipe on the down-hill side of the tank to stabilize it. JF continued to insist that a PID is not necessary, but a visual inspection is. GB conducted a visual inspection of the soil beneath the tank, and determined that no further action is

necessary and backfilling can begin. A PID was on site, but not used. Neither GB nor JF found the PID use to be warranted. JF also said that the concrete pads from the pumphouse can remain stored on the surface of the site, and not placed in the backfill or broken into smaller pieces, but if Cyn Env. or EIGov would like to place them into the backfill that is authorized.

1035- GB departed the site. JF said that the fiber glass that encased the tank can remain as backfill. Ted Scharf (TS), and Pat Hennessey (PH)) from the Maine Department of Environmental Protection's (DEP) tank inspection division arrived on site to review the operations. Cyn Env. began to backfill using 3 excavators.

1145- All DEP personnel including JF depart the site.

1300- Cyn Env. continued to backfill after taking a short lunch break.

1310- Costello Demolition was on site to begin clearing and grubbing near the base of the smoke stack. The Costello staff passed through the work site on the way to the stack. Costello had a small machine on site.

1500- Cyn Env. had most of the on-site backfill material placed in the excavation. Cyn Env. installed the orange fencing around the perimeter of the site. Costello Demolition still had personnel and a small machine on site, and was working outside of the fencing.

1630- PG, EM, BG, and JC2 left the site.

Photo 1- Pipeline alignment from 90 degree bend to pumphouse

Photo 2- Pipeline alignment from 90 degree bend to manhole

Photo 3- The inside of the pipeline after cleaning

Photo 4- Gravity and return pipelines with in conduit

Photo 5- Soil Beneath the pipeline after removal. No stained soil was observed.

Photo 6- Installation of the ventilation system to the tank before entry for cleaning

Photo 7- Monitoring the entrance to the tank during cleaning.

Photo 8- Security fence installed at the perimeter of the excavation

Photo 9- Excavators removing the tank

Photo 10- Tank removal

Photo 11 - Soil beneath the tank immediately after removal. No stained soil was observed.

Photo 12- Soil beneath the tank immediately after removal. No stained soil was observed.

Photo 13 - Soil beneath the tank and along the path of removal. No stained soil was observed.

Photo 14- Site regraded after completion of UST removal.